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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,248	03/12/2004	Brian Francis Gray	9194	8206
27752	7590	08/30/2006		
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL BUSINESS CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224				
EXAMINER DAHIMENE, MAHMOUD				
ART UNIT			PAPER NUMBER	
1765				
DATE MAILED: 08/30/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/799,248

Applicant(s)

GRAY ET AL.

Examiner

Mahmoud Dahimene

Art Unit

1765

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 June 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-6.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☒ Other: PTO 892


SHAMIM AHMED
PRIMARY EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding applicant's argument related to the fact that Pozniak (US 4136615) does not teach or suggest a step where photoresist polymer is further applied to the upper surface and sidewall (page 2), the examiner has noted such a deficiency in the office action mailed 04/04/2006 which is why the reference of Yang et al. (US 20040077178) was combined.

Regarding applicant's argument related to the fact that Pozniak teaches away from a step where photoresist polymer is further applied to the upper surface and sidewall (page 3), this argument if not convincing, Pozniak might have suggested one etch step in enough to accomplish the low aspect ratio etch application he describes, however, Pozniak does not teach away from a step where photoresist polymer is further applied to the upper surface and sidewall to accomplish a higher aspect ratio etch when needed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to seek known solutions for addressing higher aspect ratio etches because when an isotropic etch is used high aspect ratio etching is not possible without a top mask and sidewall protection, which in the art of etching is also referred to as sidewall passivation. In the related field of etching a structure, Yang teaches a step where polymer is further applied to the upper surface and sidewall of the etched feature, the method consists of applying a polymer mask to cover the upper surface and side walls of the at least one protrusion to further etch higher aspect ratio of the protrusion with control of the profile, because, with proper etch control, the method of Yang allows to etch high aspect ratio protrusions when needed, the applied mask covers the already etched top of the structure for further etching to increase the aspect ratio, the subsequent etch profile could be undercut, tapered or straight depending on the etch time and conditions. Using a photoresist mask instead of the cited polymeric mask would have been an obvious modification because photoresist is a masking material conventionally used in semiconductor manufacturing processes such as the one disclosed by Pozniak. The expectation of success is evidenced by the reference of Wolf (S. Wolf and R.N. Tauber, (Silicon Processing for the VLSI Era, Volume 1- Process Technology, Lattice Press, 1986)), Wolf teaches details about anisotropic etching and etch profile evolution (see figure 6, page 522 and figure 7, page 524) where isotropic etching affects not only the vertical dimensions but also the lateral dimension. Wolf also teaches about passivation or etch "inhibition" layer on sidewalls (page 562). The method of Yang allows for sidewall protection, which in effect applies a sidewall etch inhibition layer under the form of a polymer. As to the upper surface, top masks are conventionally used for etching. Figure 6 of Wolf shows notching (or undercut) evolution. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the sidewalls protection of Yang and control the etch time for allowing more or less nothing (or undercut) while the vertical component of the etch progresses. lateral undercutting can be controlled with etching time for each step. The references of Pozniak and Yang are therefor properly combined, motivation was presented in the office action (pages 3, 4). Pozniak also discloses the metal sheet is etched with an acid (Column 6, line 14).

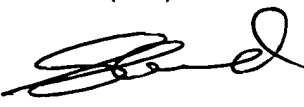
Regarding applicant's argument citing no motivation was provided for combining the reference of Luthje (Applicant's arguments page 5), a motivation was presented in page 5 of the office action.

Regarding applicant's argument citing no motivation was provided for combining the reference of Ichinose ((Applicant's arguments page 6), page 6 of the office action cites "Therefor it would have been obvious to one of ordinary skill at the time the invention was made to use flexographic printing because the method allows the possibility of selectively applying photoresist on the top and side walls of structure with precision where conventional uniform coating cannot be utilized".

Regarding applicant's argument citing no motivation was provided for combining the reference of Saksa ((Applicant's arguments page 5), a motivation was presented in page 7 of the office action.

The information disclosure statement filed on 04/11/2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it was filed after the final rejection issued on 04/04/2006. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Dahimene whose telephone number is (571) 272-2410. The examiner can normally be reached on week days from 8:00 AM. to 5:00 PM.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SHAMIM AHMED
PRIMARY EXAMINER